

petition was not associated with differences in in-hospital mortality or vascular, neurologic or other minor post-operative complications.

Conclusions: Greater hospital competition is significantly associated with increased EVAR adoption at a time when diffusion of this technology passed its tipping point. Hospital competition does not influence post-AAA repair outcomes. These results suggest that adoption of novel vascular technology is not solely driven by clinical indications, but may also be influenced by market forces.

Author Disclosures: A. J. Henry: Nothing to disclose; N. Hevelone: Nothing to disclose; S. R. Lipsitz: Nothing to disclose; L. L. Nguyen: Nothing to disclose; R. K. Sethi: Nothing to disclose.

PS40.

The Hostile Proximal Landing Zone in TEVAR: Does the Snorkel Technique Work?

Ali Shahriari¹, James B. Williams². ¹Cardiovascular Surgery, Indiana Aortic Disease Institute, Indiana University School of Medicine, Indianapolis, IN; ²Methodist Heart and Vascular Institute, Peoria, IL

Objectives: One of the major limitations to endovascular treatment of the thoracic aorta is inadequate landing zone (LZ), thrombus or heavy calcification within the LZ. Debranching of the aortic arch vessels has been used as a solution with good results. Stenting of the supra-aortic branches, the "snorkel" technique, has been described with immediate good results but the short to intermediate term outcomes are not well described.

Methods: Between January 2008 and December 2009, 16 TEVARs were performed using the "snorkel" technique for the supra-aortic branches. The indication for using this technique was inadequate LZ, and thrombus within the LZ. The charts were retrospectively reviewed and the patients were followed in the aortic disease clinic.

Results: The mean age of the patients was 62 years (range 46-84). There were 6 (38%) females and 10 (62%) males. The pathologies included aneurysms, chronic type B dissections, and traumatic aortic transections. One (6.3%) snorkel was placed in the innominate artery, 4 (25%) in the left common carotid artery (CCA), and 11 (69%) in the left subclavian artery (SCA). The mean follow-up period is 14 months (range 3-28 months). There was one (6%) death unrelated to the procedure. There were no instances of stroke or paralysis. There were no stent fractures. One (6.3%) stent became occluded a week after implantation and needed to be revised. There was one case of persistent type Ia endoleak.

Conclusions: Placement of endoluminal grafts beyond zone 2 is a more challenging and complicated procedure. These cases require meticulous planning and careful management of the supra-aortic branches. Our short-term results support the use of this technique in appropriately

selected cases, to extend the LZ beyond zone 2. Long term results are pending.

Author Disclosures: A. Shahriari: Nothing to disclose; J. B. Williams: Nothing to disclose.

PS42.

Does Endovascular Repair of Ruptured Abdominal Aortic Aneurysm Confer Survival Benefits Over Open Repair?

Naveed U. Saqib¹, Taeyoung Park², Sun C. Park¹, Robert Rhee¹, Rabi A. Chaer¹, Luke K. Marone¹, Michel S. Makaroun¹, Jae S. Cho¹. ¹Surgery, University of Pittsburgh, Pittsburgh, PA; ²Yonsei University, Seoul, Republic of Korea

Objectives: Reports of the superiority of endovascular repair (EVAR) for ruptured abdominal aortic aneurysm (rAAA) suffer from selection bias and limited FU. This study is a single center propensity score comparison of early and midterm outcomes between open repair (OR) and EVAR.

Methods: Retrospective review from 1/2001-11/2010 identified 312 pts who underwent rAAA repairs. 31 with prior AAA repair and 3 with incomplete records were excluded, leaving 37 EVARs and 241 ORs. Propensity score-based matching for sex, age, preoperative hemodynamic status, surgeon's annual AAA volume and comorbidities was performed in 1:3 ratio to compare outcomes. 37 EVARs were matched with 111 ORs. Late survival was estimated by KM curves.

Results: Operative time and blood replacement were higher with OR. Operative mortality was similar (22.2% EVAR vs 34.3% OR) with an odds ratio of 0.56 for EVAR (95% CI=[0.22, 1.30], P=0.18). Overall complication rates were similar (54.3% EVAR vs 68.0% OR), except for more tracheostomies with OR (22.9% OR vs 2.9% EVAR, p=0.018). KM estimates of 1, 2 and 3 year survival rates were similar (48%, 48%, 38.4% EVAR vs 56.4%, 38.8%, 28.2% OR).

Conclusions: EVAR for rAAA does not seem to conclusively confer either acute or late survival benefits.

	EVAR (n=37)	OR (n=111)	P
Age (years)	75	76	0.6
Male (%)	70.3	68.5	0.99
Operative time (min)	138.8	209.2	<0.0001
Packed Red Blood Cells	3.1	7.4	0.0002
Fresh Frozen Plasma	0.6	3.9	0.002
Platelet	0.3	0.8	0.02

Author Disclosures: R. A. Chaer: Nothing to disclose; J. S. Cho: Nothing to disclose; M. S. Makaroun: Nothing to disclose; L. K. Marone: Nothing to disclose; S. C. Park: Nothing to disclose; T. Park: Nothing to disclose; R. Rhee: Nothing to disclose; N. U. Saqib: Nothing to disclose.